Ilissa B. Ocko

Advisor: Dr. Daniel C. Fisher

EDUCATION Ph.D. Candidate in Atmospheric and Oceanic Sciences, Princeton University 2013 Science, Technology and Environmental Policy Certificate, Woodrow 2012 Wilson School of Public and International Affairs M.A. in Atmospheric and Oceanic Sciences, Princeton University 2010 Summer School Certificate, Arctic Climate Change, Norwegian Institute for 2009 Air Research, Svalbard, Norway Summer School Certificate, Physics of the Climate System, Utrecht University 2008 Utrecht, the Netherlands B.S.E in Earth System Science and Engineering, University of Michigan 2008 Minor in Mathematics Magna Cum Laude, Dean's List and University Honors (2006-2008) RESEARCH EXPERIENCE Graduate Student, AOS Program, Princeton University Advisor: Dr. V. Ramaswamy Ph.D. thesis: Studying the emission, transport and radiative impact of cooling and warming aerosols on climate using a global climate model Research Assistant, AOSS Department, University of Michigan 2007-2008 Advisor: Dr. Christiane Jablonowski Analyzed transformed eulerian mean using NCAR NCL Summer Intern, Physical Sciences Division, NOAA Earth System Research Lab 2007 Advisor: Taneil Uttal Designed an automated method to calculate HYSPLIT back-trajectories for International Polar Year project IASOA Research Assistant, AOSS, University of Michigan 2006-2007 Advisor: Dr. Mary Anne Carroll Statistically analyzed the climatology of northern Michigan using tropospheric ozone as a proxy for pollution, in order to determine pollution exposure Summer REU Participant, Biosphere-Atmosphere Studies in a Changing 2006-2007 Global Environment, University of Michigan Biological Station Advisor: Dr. Mary Anne Carroll Studied climatology of UMBS by calculating back-trajectories from 1999-2005; compared flow patterns with net ecosystem exchange, vapor pressure deficit, soil moisture and tropospheric ozone levels Summer Field Researcher in Greenland, AOSS, University of Michigan 2006 Advisors: Dr. Perry Samson and Dr. Robert Clauer Employed two instruments in Kangerlussuaq, Kellyville and Summit, Greenland; analyzed data; created a video from footage to disseminate experience to public Research Assistant, Undergraduate Research Opportunity Program, 2005-2006 **University of Michigan**

Casted models of ice age mastodon skeletons; pieced together excavated tusks

PROFESSIONAL EXPERIENCE

Scientific Illustrator, Princeton University Develop schematics for lab groups in Chemical and Biological Engineering	2012—
Scientific Illustrator, Weather Underground, www.wunderground.com Simplify complex weather and climate processes in diagrams and schematics to complement blogs and educate the public	2011—
Graphic Design Freelancer, Climate Central, www.climatecentral.org Simplify complex weather and climate processes in diagrams and schematics to complement articles and educate the public	2011—
Residential Graduate Student, Rockefeller College, Princeton University 2011-2012: Civic Engagement Coordinator—plan community service and philanthropic activities for undergrads 2010-2011: Academic Coordinator—planned résumé, internship, and thesis-writing workshops for freshmen and sophomores	2010—
Conference Organizer, IMAGINE a Sustainable World, Princeton University Head of Website and Advertisement Committees Coordinated a one-day sustainability conference for students and public with three panels of experts, two keynote speakers, and poster session	2009-2010
Weather Anchor, Newsfeed, WOLV TV, University of Michigan Broadcasted weather forecast on student-run television network Chief meteorologist 2007-2008	2006-2008
NORS AND AWARDS	
Award for Outstanding Poster Presentation, World Climate Research Programme Outstanding Student Poster Presentation, American Meteorological Society (AMS) NSF Graduate Research Fellowship AMS Industry/Government Graduate Fellowship, NOAA Climate Program Office James B. Angell Scholar, University of Michigan—2+ semesters of A's	2011 2011 2009 2008 2008
Outstanding Student Leader Award Honorable Mention, UM Office of Student Activities First Place Winner, UM Best Student Paper on Environmental Issues & Climate Change	2008 2007
Weather Underground Inc. Scholarship Eliza Ann Roark Scholarship Marian Sarah Parker Scholarship—by invitation only	2007 2006 2006
NOAA Ernest F. Hollings Scholarship	2006
IIVERSITY ACTIVITIES	

UNIV

Princeton Energy and Climate Scholars	2010
Princeton University AOS Program Faculty-Student Liaison	2009-2010
Princeton University Graduate Student Government Assembly	2009-2010
University of Michigan College of Engineering Undergrad Student Advisory Board	2007-2008

SCIENTIFIC SOCIETIES

Association of Polar Early Career Scientists

Earth Science Women's Network

American Meteorological Society and University of Michigan student chapter

American Geophysical Union

Order of Omega National Honor Society

Delta Epsilon Iota Academic Honor Society

Michigan Society of Undergraduate Earth System Scientists and Engineers, President 2007-2008

SKILLS

Programming: IDL, Matlab, C++, Mathematica, Maple, IGOR Pro, TCL, NCL

Visualization: IDL, Matlab, NCL, GrADS

Software: Photoshop, Illustrator, Dreamweaver, Microsoft Office, FinalCut Pro, Motion, Keynote

CONFERENCES

Princeton Graduate Student Symposium, Princeton, NJ-poster presentation	2011
WCRP Open Science Conference, Denver, CO-poster presentation	2011
90 th Annual AMS Meeting, Seattle, WA-poster presentation and AOS recruiter	2011
22 nd Montreal Protocol Meeting, Bangkok, Thailand – observer/interviewer	2010
89 th Annual AMS Meeting, Atlanta, GA-student attendee and AOS recruiter	2010
88th Annual AMS Meeting, Phoenix, AZ-student attendee and AOS recruiter	2009
87 th Annual AMS Meeting, New Orleans, LA-student attendee	2008

PUBLICATIONS

Ocko, IB, V Ramaswamy, Offsetting climates responses to anthropogenic black carbon and sulfate aerosol direct radiative forcings, in prep for submission to Geophysical Research Letters (2012)

Roy-Mayhew, JD, <u>IB Ocko</u>, DL Mauzerall, Inequivalent emissions: How time horizons affect perceptions of short- and long-lived climate forcers, in prep (2012)

Ocko, IB, V Ramaswamy, PA Ginoux, Y Ming, LW Horowitz, Sensitivity of the aerosol direct radiative forcing offset to physical climate factors, in review, Journal of Geophysical Research (2012)

Bankuti, M, B Ellis, M Frades, D Kanter, J Losh, <u>I Ocko</u>, J Roy-Mayhew, P Shevlin, C Sierawski, A Wasserman, J Zuckerman, D Mauzerall, Complements to carbon: Opportunities for near-term action on non-CO₂ climate forcers, Policy Report, Princeton University (2011)

SERVICE

Graduate School Information Seminar for Princeton MIRTHE summer interns—talk	2012
Book reviewer for Science journal	2012
Reviewer for Atmospheric Research journal	2011 —
Rutgers University Undergraduate Research Symposium—judge	2011
Graduate School Information Seminars for Rider University students—two talks	2010/2011
Graduate School Information Seminar for NOAA GFDL summer interns—talk	2009
Middle School Science Olympiad Workshop – volunteer	2008
Graduate School Information Seminar for University of Michigan students—talk	2008
Marian Sarah Parker Scholarship Orientation—inspirational talk	2008